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The English Flood of 1953

*John P. Spiegel**

The National Research Council's Committee on Disaster Studies sent us to England about two weeks after the North Sea flood of February 1, 1953, to set up a rather extensive comparative study of the flood's effects in several communities. Unfortunately, the larger study did not materialize and we were compelled to learn what we could by ourselves in about two weeks. The following report, therefore, must be regarded as very tentative. It deals with Kimbark¹, one of the two flooded communities we were able to study.

Kimbark Before the Flood

Kimbark was a relatively new settlement located on an island less than 10 square miles in area in the Thames Estuary about 35 miles from London. Here the estuary is so broad that it resembles the North Sea itself. The island is cut off from the mainland opposite the estuary side by a narrow creek. A single bridge is the only connection to the mainland. Everything that comes in or goes out of the community—all transport and all communication—must pass over this bridge. The land is virtually at sea level and was first settled for farming about two hundred years ago, mainly by Dutch people. Indeed it resembles some of the Dutch communities today in its physical characteristics. Kimbark is protected against the sea by dykes constructed by Dutch engineers, and the streets have Dutch names.

For years Kimbark was settled only by farmers. After World War I it began to be settled more and more by working-class migrants from the east end of London. These people commonly visited Kimbark for brief week-end holidays at first. They found it a pleasant and inexpensive place to bathe inasmuch as it was not one of England's fashionable sea-side resorts or watering places. Then the people who first came for the weekends began to spend longer summer holidays on Kimbark. Finally, many of these Londoners decided it would be a good place to reside the year around when they no longer had to work in London.

The migrants built cottages and shacks in quite unique and ramshackle fashion. Families built their own houses over periods of several years, adding little bits annually until their houses became fairly habitable. There was no order or town plan in this construction between the two world wars when much of the building occurred. Each family or settlers simply staked out what property they desired and built what

they wanted and could afford. These working-class people developed a great pride of ownership, for at long last they had land of their own and a house of their own detached from others.

After World War II the settlement of Kimbark continued at a tremendously increased rate. By 1953 there were about 12,000 people living on the island. The town was governed by an urban-district and, as we shall see, the characteristics of the council members turned out to be very important factors in the course of events following the flood.

The Flood

The flood came to Kimbark very rapidly in the early morning of February 1, 1953. Its shattering effects were prominent and dramatic. The flood was the product of a rare combination of wind and tide unlike anything known in the past 250 years. Meteorologists explained that a small cyclone in the Northeast Atlantic in the last week of January, fed by a warm and calm air mass, grew into a big storm center which then pushed eastward across Scotland to the North Sea. By coincidence the storm arrived over the North Sea at its climax with wind clocked officially at 115 to 125 miles an hour, and at the very time when high spring tides were in full flood. The northwesterly gale drove the waters with mounting pressure against the North Sea's southern bottleneck just as the tides were pushing with maximum force against the low-lying land. Something had to give under the strain, and the weakest spots in the land's defenses—river estuaries and man-made walls—were what gave way in England, Holland and Belgium.²

The particular disaster at Kimbark occurred not as a result of the water topping the dykes—the dykes were very high—but because the dykes broke. The pressure of the water scouring against the bottom of the dykes combined with swirling and dribbling over the top, weakened the structures at certain places in the wall. The results were especially catastrophic at Kimbark, because as the town had grown, a new dyke had been constructed without removing the older one. Thus, there was an inner and an outer dyke with numerous houses between them. When the outer wall gave way between 1:00 and 1:30 a.m. on February 1st the area between the inner and outer dykes filled up rapidly. Water rushed in, hit the inside dyke, bounced back and swirled around inside like water flowing rapidly into a bathtub. The force of the water going in and the eddies and currents set up were enormous.

* Dr. Spiegel, a psychiatrist, is Lecturer and Research Associate in Social Relations, Harvard University.

1. Owing to the official nature of Dr. Spiegel's work, the actual name of this community cannot be revealed.

2. Associated Press Dispatch, London, February 2, 1953.

Initial Reactions

The rapidity of the event gave people practically no opportunity to stop and think. Aroused from their sleep, they were faced with a very sudden emergency situation. They were awakened by the sound of water; dribbling, trickling, rushing and gurgling, and often by the sound of their furniture being rustled around in the house. The water came pouring in through cracks in the doors and windows. In some cases a man would reach for his shoes or his pipe, intending to get up and see where the water was coming from—perchance a tap had been left running!—only to find that his hands were in water. In other cases water came over the bed while one was sleeping.

In one way or another, the people had very little time to orient themselves to the stimuli which suddenly confronted them. For this reason many initially made a series of incorrect assumptions as to what was going on. The usual process was an attempt to relate the emergency stimuli to normal events. A wife would say to her husband, "You left the faucet running," or "The pipes have broken." It was very difficult for people to comprehend and accept the reality of the emergency that faced them. When one finally realized that the water was rising very rapidly outside, and could be seen rising within the house as well, a rapid decision had to be made. What to do? Should one try to get out the front door, or try to get up higher in the house? But these were bungalows without second stories, so where was one to go?

Those who made the correct decision saved their lives. The correct decision was to get up through the ceiling onto the roof or up onto the porch if there was a high porch railing. Fortunately, most people did make the correct assessment. Those who did not and who tried to open the door and get out either let in a mountain of water which trapped them in the house, or they were swept away. In those parts of the flooded area which were worst affected, the currents were too violent for one to swim to safety. More than 50 persons lost their lives and for days several hundred others were missing. All of the 12,000 residents had to be evacuated, and Kimbark was reported to have suffered the greatest damage of any British community.³

The flood presented a series of immediate threats. First, there was the threat to the very life of the individual. Second, there was the threat to the intactness of one's family. The threat to the family was present throughout the course of the disaster and its aftermath. During the rescue and evacuation period families would get separated, and there was much anxiety and distress as to the whereabouts of mother, father, child, or grandparent. The third threat was to the family's property or possessions. Finally, there was a fourth threat to the existence of the community. Since Kimbark had to be evacuated, the community was disrupted and could only reestablish itself as houses again became habitable.

Processes of Adjustment

Now, permit me to describe some of the mechanisms or processes that took place here, and their effect on the Kim-

bark community. The first defense against such disasters as floods is an adequate warning system, of course. Warning of disaster makes for preparedness and effective action. Kimbark had no warning of its disaster, even though the flood had struck the north of England and Scotland on the afternoon of January 31st, and did not reach Kimbark until 1:00 a.m. on February 1st. Word of the disaster to the north simply did *not* get down to the south of England. The reason was that the warning system for floods, and anything else having to do with water, is under the control of a number of organizations called "River Boards"—a traditional institution with a long history. Each River Board pays attention only to its own river and its outlet, plus the land immediately adjacent thereof. No board, it seemed, felt responsible for the neighboring rivers, other than to report possible water levels to the other river boards. A few communities received reports from Scotland Yard with a message to expect flood tides, but there was no indication as to just how disastrous the flood might be. Furthermore, there was no mechanism for disseminating the message, once it was received, by the few civil authorities to whom it was sent. Nor was there an apparatus by which the message could be relayed at night, an especially critical omission.

Another element in the country's governmental structure which affected the organizational readiness of the Kimbark community was the Civil Defense apparatus. As a result of World War II and Britain's critical position with respect to any future war in Europe, civil defense is much more highly organized in that country than here. The civil defense plan calls for the principal authority in each local community to be invested in the chief local official, usually the town clerk. The immediate rescue operations incident to any disaster, or enemy action, are to be in the hands of the police. This is what the plan calls for. In the case of a natural disaster such as flood, the actual situation, with regard to instituting of Civil Defense services was at that time highly ambiguous and the officers of the town were under no responsibility to call out Civil Defense measures. However, because of the magnitude of the disaster, the complete disruption of community organization, and the emergency nature of the evacuation and its consequences, most people were thinking in the images of Civil Defense services and the wartime emergency.

There were other reasons for the plan not operating in Kimbark during the emergency. One was that the town clerk failed to arrive on the scene of action, although he had been notified of the emergency. The chief police authority in the town was a constable, and by plan he should have taken charge of the warning system, determined the seriousness of the emergency which confronted the town, and decided what should be done. But this constable, like other constables, was a man trained to take orders, to proceed with caution and not to "stick his neck out." So Kimbark's constable went from one dyke to the other trying to decide the degree of danger and whether he should alert the community. By the time he had decided the flood was going to be disastrous he was isolated by the water himself and was unable to warn anyone.

In consequence of the officially designated leadership being thus incapacitated, the situation demanded spontaneous leadership. Fortunately for Kimbark this occurred. One man

3. A corp of 500 residents remained on the island throughout, most of them actively contributing to the rescue and relief measures and too, maintaining the life of the remaining community and of the emergency services called in.

saw what was happening and acted promptly. He was a surveyor and engineer of the town who had been a troop commander in World War II. When he first learned of the possibility of flooding, he went directly to his office where he called the telephone exchange and asked them to transfer any messages reporting signs of water to his office. The first call came soon enough. He thereupon mobilized a crew of men and directed them to warn the public by word of mouth. He also put in a phone call immediately to the mainland and requested ambulances, police reserves, boats, and other emergency equipment. Had this man not sent out the emergency message entirely on his own, acting on intuition and minimum information and before he knew the actual extent of the disaster, Kimbark would have been in a far worse position. Immediately after he telephoned his urgent appeal for emergency assistance all communications with the mainland were cut.

From this time on, the whole operation of rescue and evacuation was in the hands of spontaneous, unofficial leaders not designated in the civil defense plan. They came forth from within Kimbark and from the surrounding countryside, the "shock-absorbing" area, so to speak. From an organizational point of view, these spontaneous processes were initiated partly on the basis of individuals' previous war experience. That is, people knew something of the roles they should play. The spontaneous leadership and action also occurred because certain kinds of people took authority for themselves. They cut "red tape," hired entire bus lines, and got the railroads operating with no prior authority. They were willing to await official authorization after the fact. Because of this spontaneous leadership and prompt action hundreds of lives were saved, and the community was spared far greater destruction.

Thousands of people were exposed to cold and wind and water over many, many hours while awaiting rescue. Families were separated and property destroyed. Nevertheless, during the extreme emergency period, while the flood waters filled the town, morale was extremely high in spite of the great threat to life and terrific feats of endurance.

The tensions which developed at Kimbark came *after* the period of extreme emergency and urgent defense was over. It was during the repair period, during the time of longer-run adjustment to the emergency, that tense conditions

appeared. This was when the people returned to their homes to clean and restore their houses and possessions, to resume normal life, to reunite their scattered families. All of this had to be done with little or no money, for Kimbark was a poor community to begin with and most of the residents had now lost many of their possessions and much of the little money they had before. At this point the situation of high morale was suddenly reversed. Previously, there had been very little physical or emotional illness despite the exposure and tension incident to the flood which came on top of an influenza epidemic which was raging when the flood came. Now, in the adjustment period, however, people began to get sick; they began to get disturbed and the community began to grumble. Indeed, there was almost a riot against the town officers one time because of their unwillingness to give adequate support to the families.

The viewpoint and values by which the officials acted in this period became an important issue during the reconstruction period. The town officials held, "The important thing is the initiative and responsibility of the individual. We're not just going to give handouts of dole and relief and the Lord Mayor's funds [which was available to them] simply because the people ask for it. They must prove that they need it." This view was widely resented by the citizenry. The officials attempted to allocate money and other forms of aid on an individual basis. However, inasmuch as nearly everyone was in the same socio-economic category, this policy made little sense. Instead, they might better have given everybody as much support as they possibly could.

At the same time, it should be noted that the citizens themselves were ambivalent on the question of welfare and community support versus individuality and initiative. Whereas they had desired to build their own houses with no town planning or interference in the first place, now that they were hard-pressed and under great tension, they desired maximum community support and application of a social welfare concept. When this did not occur, the discord within the community, and between the community and the central government, became very intense. In addition to the near riots, many persons declared they wanted to move away from Kimbark and never come back.
